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ABSTRACT

This annotated bibliography update contains 61 citations, the primary focus of which is on postsecondary-level linkages between schools/colleges and business/industry. Many citations are specific to vocational education. Citations include administrative material, journal articles, opinion papers, project descriptions, and reports. Materials for inclusion in this bibliography were located through the Florida Educational Information Service (FEIS), which conducted searches of computerized information retrieval systems (specifically the ERIC--Educational Resources Information Center--database on DIALOG, and the RIVE--Resources in Vocational Education--database on BRS--Bibliographic Retrieval Service.) For each entry, information is provided about title, author, date published, content, format, and availability. (KC)

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Business/Industry/Education Linkages

A Bibliography Update
April 1988

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Business/Industry/Education Linkages

A Bibliography Update
April 1988

State of Florida
Department of Education
Tallahassee, Florida
Betty Castor, Commissioner
Affirmative action/equal opportunity employer

Division of Vocational, Adult, and Community Education

April 1988

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Introduction

This bibliography update is a single continuous grouping of citations whose primary focus is on postsecondary-level linkages; many citations are specific to vocational education.

Citations include administrative material, journal articles, opinion papers, project descriptions, and reports.

Materials for inclusion in this bibliography update were located through Florida Educational Information Service (FEIS). FEIS conducted searches of computerized information retrieval systems (specifically the ERIC—Educational Resources Information Center—database on DIALOG and the RIVE—Resources in Vocational Education—database on BRS—Bibliographic Retrieval Service).

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TITLE: *Arizona's Blueprints for Building Partnerships.*

DATE: 1985

AUTHOR: Packard, Beth

DEVELOPER: Arizona State Dept. of Education, Phoenix

ANNOTATION: This publication reports a study of business/education partnerships that have evolved in Arizona. Chapter 1 is a brief introduction. Chapter 2 discusses related literature concerning incentives and disincentives for business and educational involvement. Chapter 3 presents descriptions of model partnership projects—nine high school, seven community college, and two joint high school/community college. Each description provides this information: program area, partnership purpose, organizational structure, sponsors, contact, overview, implementation, success factors, and benefits. Chapter 4 describes the study design, which consisted of two elements: (1) an educator survey to identify partnerships between vocational education and the community and to provide insights into partnership formation and maintenance; and (2) a business survey to compare perceptions of the private sector with those of the public sector for factors contributing to the partnerships. Chapter 5 reports these findings: (1) informal organizations have been more often used, (2) another form of collaboration uses existing organizational structures, (3) important factors in initiating partnerships were an established rapport and communication between business and school and provision of mutual benefits, (4) five factors to maintain partnerships were identified, and (5) administrative support was required. Appendixes include a sample survey, contacts for technical assistance, and an annotated listing of practical guides to collaboration. (YLB)

FORMAT: Project Description, 71p.

AVAILABILITY: For a microfiche copy of this document order ED281016 from FEIS.

TITLE: *Building Linkages between Vocational Education and Trade Associations.*

DATE: 1987

PROJECT DIRECTOR: Butler, Roy, (614) 486-3655
The Ohio State University, The National Center for Research in Vocational Education, 1960 Kenny Road, Columbus, OH 43210-1090

ANNOTATION: This project will help vocational education personnel understand trade associations and their usefulness to vocational education, help trade association executives understand their potential involvement in secondary and postsecondary vocational education, and help both groups refine or develop policies and plans for working relationships to improve vocational education. Products will be disseminated and expertise provided to encourage the flow and use of information and ideas between vocational education and trade associations. Activities will include preparing and disseminating a handbook of guidelines on linkages between vocational education and trade associations, making presentations at national meetings of vocational education and trade associations, and providing technical assistance.

FORMAT: Project Description

NOTE: Start Date 16 Jan 87, End Date 15 Jan 88

TITLE: *The Business and Industry Center: A One-Stop Storefront Approach.*

DATE: 1985

AUTHOR: Troyer, Diane K

ANNOTATION: In order to maximize its resources to fulfill its action-oriented mission and strong commitment to community and economic development, El Paso Community College (EPCC) developed a Business and Industry Center as a rapid response system for meeting the needs of the business and industry community. The Business and Industry Center offers a comprehensive range of services, including short- and long-term, credit and non-credit, and on- and off-campus courses, information services, and walk-in technical assistance. These services are provided through four functional components: (1) continuing education for business and industry, which includes business, management, industrial, real estate, computer skills, secretarial science, and word processing, (2) the Worker Training Institute, which offers college credit courses at business and industry sites, (3) Project 90, the Chamber of Commerce training clearinghouse, and (4) the Small Business Resource Center, a walk-in technical assistance center, catering especially to very small businesses, minority businesses, and women in business. These four components link with each other and the other departments of the college to effectively focus available resources to meet community goals. (EJV)

FORMAT: Conference Paper, Project Description, 6p.

NOTE: Paper presented at the Fall Conference of the National Council for Occupational Education (Denver, CO, October 3-5, 1985).

AVAILABILITY: For a microfiche copy of this document order ED273309 from FEIS.

TITLE: *Career Development in the Workplace: Academia and Industry Join Hands.*

DATE: 1986

AUTHOR: Haag-Mutter, Priscilla

ANNOTATION: Sinclair Community College (SCC) in Dayton, Ohio has designed a career development workshop for both hourly and salaried employees of Monarch Marking, Inc. to help the local industry to encourage its motivated employees to set and start working toward new career goals within the company. From 12 to 15 employees take part in each 16-hour, three-part workshop. The first session consists of orientation to the concept of career development, and a round-table discussion with management representatives to discuss job opportunities in different areas of the company. The second session, which is led by staff members from the Career Planning and Placement Center of SCC features three activities: (1) self-assessment of transferable skills, (2) work values clarification, and (3) exploration of identified careers. During the third session, the employees reconvene with college personnel for individual career counseling and wrap-up. Because programs of this nature often result in employees returning

to their jobs with a variety of questions, the company's human resource planning and development staff conducts a meeting for supervisors of employees who have taken part in the workshops. Of the workshop participants, approximately 16% of the hourly employees have been promoted to salaried positions, while another 15% transferred to other areas of the company to start working toward their career objectives. (EJV)

FORMAT: Position Paper, 10p
 AVAILABILITY: For a microfiche copy of this document order ED283563 from FEIS.

TITLE: ***The CCRI Electric Boat Program: A Partnership for Progress in Economic Development.***

DATE: 1986

AUTHOR: Liston, Edward J

ANNOTATION: The Community College of Rhode Island (CCRI) has made a strong commitment to building partnerships with business and industry. CCRI's first customized training program was developed in 1982 with the National Tooling and Machine Association (NTMA), and was designed to enable apprentice machinists to receive the classroom training required to earn a journeyman's certificate while simultaneously earning credit toward an associate in applied science degree. Following the success of the CCRI/NTMA program, the college entered Companies, including General Dynamics Corporation's Electric Boat Division. The more than 100 students enrolled in the CCRI/Electric Boat Program work as apprentice welders, shipfitters, machinists, pipefitters, marine assembly machinists, and sheet metal mechanics, while receiving classroom training required for the apprenticeship and earning credit toward an associate degree. For the most part, the employees' needs did not fit into existing CCRI degree programs. To remedy this, the college requested and received approval for a new degree program for an Associate in Applied Science in Technical Studies (AASTS). The AASTS allows students to earn an associate degree in 3 years without being limited to concentrating on predetermined technical fields. Students attend some classes at the CCRI campus and others at the company facility, with the company paying full tuition and the cost of books and supplies. (EJV)

FORMAT: Conference Paper, Project Description, 9p

NOTE: Paper presented at the Annual Conference of the National Council for Occupational Education (12th, San Diego, CA, October 15-19, 1986)

AVAILABILITY: For a microfiche copy of this document order ED275373 from FEIS

TITLE: ***"Cincinnati's Industry/Education Partnership Goes Nationwide."***

AUTHOR: Kaplin, Marjina M.

JOURNAL: *Vocational Education Journal*, v61 n7 p53-54 Oct 1986.

ANNOTATION: The author presents the instructional modules in industrial machining and fabrica-

tion developed by the Cincinnati Industry/Education Partnership involving industry, government, and vocational education. The 16 modules each include an instructional videotape, an instructor's manual, and a student handbook. Materials availability information is included. (CH)

TITLE: ***Classroom on the Mall.***

DATE: 1986

PROJECT DIRECTOR: Lyba, Edward. (717) 544-9131. Schuylkill County Area Vocational-Technical School, Box 130, Mar Lin, PA 17951

ANNOTATION: Students will acquire entrepreneurship skills and techniques in a realistic business setting through classes developed on the mall curriculum developed by Schuylkill County. Theory will be taught at the school, and students will visit Schuylkill County Mall to view hands-on activities. Through an agreement with mall management, students will operate seasonal kiosks, providing them the opportunity to order supplies, decorate the kiosks, provide manpower, and sell goods. A final report will be delivered.

FORMAT: Project Description

NOTE: Start Date 01 Jul 85, End Date 30 Jun 86

TITLE: ***Collaborating with the Schools: A Strategy for School Improvement.***

DATE: 1986

AUTHOR: Intriligator, Barbara A

ANNOTATION: This paper posits guidelines for planners forming interorganizational arrangements—or collaboratives—among universities, businesses, community organizations, and schools. The paper hypothesizes that schools can benefit from collaboratives and that these partnerships' success is attendant upon mutual understanding of a collaborative focus. Principles of collaboration were originally identified through a longitudinal study of a doctoral program arrangement between five county school systems and the University of Maryland. Additional research results were incorporated into the emerging model. Interorganizational relationships are newly created, single organizations formed voluntarily to achieve an interdependency of formal collaboration. This model features relationships among four characteristics: (1) Environmental, (2) Relational, (3) Procedural, and (4) Structural. Environmental characteristics involve organizations entering the arrangement and the external influences upon operations. Relational characteristics include properties that describe relationships, for example, involvement by member organizations' representatives. Shared decisionmaking defines the collaborative focus. Procedural characteristics concern formality, exchange process, and administrative processes. Organizations' equitable exchange of goods and services is central to collaboration. Structural characteristics are features of member organizations, collaborative demography, resources, and coordination mechanisms. Implementation of sponsored programs is the least developed aspect of the model at this time. Public organizations are favoring collaborative management principles because organizational settings now approximate settings of the interorganizational arrangements. (CJH)

FORMAT: Conference Paper, Evaluative Report, 26p
 NOTE: Paper presented at the Annual Meeting of the American Educational Research Association (67th, San Francisco, CA, April 16-20, 1986)
 AVAILABILITY: For a microfiche copy of this document order ED277089 from FEIS

TITLE: **Collaboration in Adult Education. Overview. ERIC Digest No. 60.**
 DATE: 1987
 AUTHOR: Ament, Rebecca R
 DEVELOPER: Office of Educational Research and Improvement, Washington, DC
 ANNOTATION: Current issues are complex and funding is difficult to obtain as adult education providers try to meet the needs of the community, business, and industry, therefore, collaboration can be very advantageous. Information, ideas, and resources can be pooled, and duplication and harmful competition can be avoided. Four factors that are important for successful relationships are reciprocity in giving and receiving resources, system openness, trust and commitment, and flexible structure. Administrators who can identify bargaining power in their resources and who can recognize needed resources contributed by outsiders, who are willing to serve on outside committees, who have skills in human relations, and who are attentive to the details of planning and organization contribute to collaborative relationships. Several authors have suggested the following strategies for developing productive collaborative relationships: (1) identify and clearly state specific purposes for desiring a collaborative relationship; (2) develop objective criteria for selecting partners; (3) locate possible partners; (4) negotiate specific written agreements; (5) consider all ideas so that final decisions will be fully supported; (6) determine communication mechanisms and use them frequently; (7) establish monitoring and evaluation procedures to correct problems; and (8) familiarize the staff of the participating organizations with the agreements. Some of the common types of collaborative arrangements in adult education are with business and industry, professional groups, and community economic development programs (KC).

FORMAT: Information Analysis, 4p
 AVAILABILITY: For a microfiche copy of this document order ED282091 from FEIS

TITLE: **"The Community College Approach to Serving Business and Industry."**
 AUTHOR: Borquist, Bruce
 JOURNAL: *Community Services Catalyst*, v16 n4 p19-21 Fall 1986
 ANNOTATION: Describes Clackamas Community College's unified marketing plan, which provides a range of services (e.g., information and referral, one-to-one counseling, professional development seminars, pre-employment training, and tailor-made training) to six business/industry segments (i.e., explorers, start-ups, microbusinesses, small businesses, established businesses, and declining businesses). Stresses the importance of partnerships with other agencies (AYC).

TITLE: **Community College Leadership in Developing World Trade Opportunities for Local Business and Industry.**
 DATE: 1986
 AUTHOR: Lindeman, Lynn W.; Schwartz, Martin F
 ANNOTATION: A community college can benefit its students, community, and nation by helping local businesses develop their world trade potential. Most community colleges have the expertise, resources, and capability to help local businesses benefit from these export opportunities. Rockland Community College (RCC) in New York, for example, has designed and implemented a number of programs to serve the special needs of its community, including training in management, accounting, marketing, travel and tourism, office technology, data processing, retailing, and advertising. These programs have been offered as pre-career programs, on-the-job supplementary training, customized training for local businesses, and cooperative efforts. Regular contacts with local groups such as the Private Industry Council and Industrial Development Association have suggested many programs for the college curriculum, including a program of study in international business; and resulted in the establishment of a non-profit membership organization to promote international trade and provide assistance to firms dealing with international trade. RCC trustees, administrators, and faculty have played vital roles in providing leadership to local businesses to help develop their export potential. Trustees participate by clarifying the institution's mission, moving the college toward greater community responsiveness, ensuring adequate funding, and communicating with the community. Faculty and administrators can participate by serving international students, giving the curriculum a global perspective, offering foreign languages and making them relevant, sponsoring co-curricular activities and faculty exchanges, promoting study abroad, and providing public forums on international topics (EJV).

FORMAT: Conference Paper, Project Description, 24p
 NOTE: Paper presented at the Joint Conference of the National Council for Occupational Education and the Association of Community College Trustees (San Diego, CA, October 15-19, 1986)
 AVAILABILITY: For a microfiche copy of this document order ED274395 from FEIS

TITLE: **Community College Links with Local Hospital to Provide Low-Cost, Convenient Continuing Education Courses for Nurses.**
 DATE: 1986
 AUTHOR: Leuchtman, Patricia; Purinton, Esther
 ANNOTATION: The Nurses Educational Collaborative (NEC) is a 4-year-old collaborative effort linking the Division of Continuing Education at Greenfield Community College (GCC) with the Division of Health Education and Training at Franklin Medical Center (Greenfield, Massachusetts). The program's goal is to provide accessible, affordable, continuing education courses for both registered and licensed practical nurses at times and locations convenient for working nurses. Course offerings are recommended by an advisory council of 25 nurses and nurse administrators who conduct needs assessments and

meet twice yearly to develop their recommendations. The staff of the NEC includes five part-time administrative workers, two part-time clerical workers, and part-time teachers hired as needed. GCC handles the administrative functions and the Franklin Medical Center provides information and assistance on more substantive matters. All money supporting NEC comes from student tuition, and neither the Medical Center nor GCC charges NEC for the time their staffs spend working for the organization. The NEC offers approximately 25 courses during each academic semester and 12 courses during the summer, with classes meeting on campus, at the Medical Center, and other places throughout the community. Although the advisory council is charged with formally evaluating the program, to date only informal feedback has been obtained. This feedback shows that NEC offers a high quality product at a low price. (LAL)

FORMAT: Project Description, 9p

AVAILABILITY: For a microfiche copy of this document order ED276470 from FEIS.

TITLE: **Community Colleges and Apprenticeship Training: A Winning Partnership.**

DATE: 1986

AUTHOR: Renz, Frank, Styer, Michael

ANNOTATION: In 1984, a partnership was developed between San Juan College (SJC) and the Public Service Company of New Mexico's (PNM) San Juan Generating Plant. An agreement was reached to promote training through a planned educational experience in which SJC awarded credit for courses taught by PNM training personnel. The program began in response to the need for an industrial instrumentation program that would meet PNM's needs, and proved so successful it was expanded into apprenticeship programs in eight crafts. This expansion involved the development of curricula for each craft, the establishment of associate of applied science degree programs, the preparation of an informational handbook, job training sheets, class/work schedules, and progress/status sheets; and the establishment of policies and procedures. In light of the success of this partnership program, in 1985 SJC entered into a partnership with the Arizona Public Service Company to provide training for apprentices in the electrical, instrumentation, and machinist crafts and established an Industrial Management program at PNM to serve blue collar as well as low- and mid-management employees. SJC is continuing the development of its partnerships, looking at clerical positions, security guards, management, and childcare as possible areas for future program development (EJV).

FORMAT: Conference Paper, Project Description, 190p

NOTE: Paper presented at the Annual Conference of the National Council for Occupational Education (12th, San Diego, CA, October 15-18, 1986).

AVAILABILITY: For a microfiche copy of this document order ED273347 from FEIS.

TITLE: **"Connecting School-Business Partnerships with Educational Reform."**

AUTHOR: Clark, Donald M.

JOURNAL: *School Business Affairs*, v53 n2 p24-25 Feb 1987

ANNOTATION: The needed cooperation between industry and education means schools should recognize industry's central role in the partnership process to help schools improve academic and vocational education. Cooperation will involve planning, training, reevaluation of resource allocation, and financial investment. (CJH)

TITLE: **A Consortium Effort with Industrial Linkages.**

DATE: 1986

AUTHOR: Thompson, Hugh L.

ANNOTATION: The consortium approach to planning and managing academic programs in technology at Indiana University and Purdue University is discussed. Of the eight campuses of Indiana University, three have a guest/host agreement with Purdue. Purdue's School of Technology provides career educational opportunities to students who have application-oriented technological interests and aptitudes. Close liaison with employers and graduates provides feedback to evaluate and update programs. The School of Technology has also established advisory committees at sites in the state where programs in technology are offered. Three types of advisory committees commonly used by each of the respective campuses are: general advisory board (institutional), program advisory board (specific programs), and ad hoc advisory boards or committees (special or temporary). Indiana University has formed a consortium with Indiana Vocational Technical Institute and the local school corporations. One objective is to assess the educational needs of high technology industries in North Central Indiana. Information is provided on matters about which committees advise the faculty and administration and or arrangements for guest/host agreements, including human, fiscal, and physical resources. (SW)

FORMAT: Project Description, 23p

AVAILABILITY: For a microfiche copy of this document order ED273194 from FEIS.

TITLE: **Curriculum Development.**

DATE: 1987

PROJECT DIRECTOR: Moyer, Bruce, (406) 721-1330. Missoula Vocational-Technical Center, 909 South Avenue West, Missoula, MT 59801

ANNOTATION: Twelve program areas will be updated, and two new programs will be developed with business and industry input. A professional person on half-time assignment will update relevancy in current curriculum and determine trends and needs in business and industry. On-site review and a survey of employers of program graduates will be used for evaluation.

FORMAT: Project Description

NOTE: Start Date 01 Jul 86, End Date 30 Jun 87

TITLE **"Customized Training with CBOs."**
 AUTHOR Zaragóza, Federico, Huber, Richard
 JOURNAL *Vocational Education Journal*, v62 n3 p32-33 Apr 1987
 ANNOTATION The Perkins Act makes funds available for programs that combine the resources of community-based organizations (CBOs) and vocational education. Partnerships between postsecondary institutions and CBOs are being designed around private sector needs. (SK)

TITLE **"Developing a Computer-Integrated Manufacturing Education Center."**
 AUTHOR Langer, Victor
 JOURNAL *New Directions for Continuing Education*, n33 p27-37 Spr 1987
 ANNOTATION Describes a three-year project to design a program in high technology at Milwaukee Area Technical College. The school and 11 area industries collaborated in program design and implementation. The purpose of the program is to train or retrain high school graduates to install, operate, and maintain technological systems. (CH)

TITLE **Developing and Managing Technology Partnerships between Industry and Higher Education.**
 DATE 1986
 AUTHOR Mayfield, W. A.
 ANNOTATION The University of Texas at Tyler (UTT) has assumed the responsibility of developing and initiating a partnership organization between industry and education within the East Texas community. A communication network involving local, state, and national government, chambers of commerce, industry, business, and education will be the core of the partnership. The intent of this partnership effort is to identify the potential benefits, investigate opportunities that can evolve from such a relationship, explore the level of interest within the East Texas community in developing a partnership organization, and determine the population to be served by the partnership organization concept. Meetings with the groups that will be involved will focus on gathering information related to a "Proposed Technology Partnership Organization" graphic model. UTT will appoint a technology partnership council and a communication network. When a technology application center is developed, UTT will coordinate responsibilities with that center. A feasibility study currently being conducted will determine training/educational needs, participants, existing training/educational opportunities, and existing training centers that would participate. (The survey and survey data and a working draft of the Technology Partnership Organization are appended.) (YLB)

FORMAT: Conference Paper; Project Description, 20p
 NOTE: Paper presented at the Annual Convention of the American Vocational Association (Dallas, TX, December 1986)
 AVAILABILITY: For a microfiche copy of this document order ED276861 from FEIS.

TITLE **Findings on Employer/Vocational Education Survey.**
 DATE 1986
 AUTHOR Donovan, Mary Ann
 ANNOTATION A nationwide survey of private sector employers elicited information on the level of business interest in various vocational educational services and programs. It also provided insight into how business can and does contribute to vocational education. Nearly all employers (94 percent of the 262 who returned questionnaires) indicated some interest in at least one of the vocational education services listed on the questionnaire. Activities perceived to be of greatest value were offering skill training for a specific occupational area, recruiting qualified permanent personnel, providing vocational training for employees, and training to improve managers' supervisory techniques. Nearly 9 of every 10 employers indicated a willingness to contribute by using company resources to support vocational education. Respondents would consider participating in local review committees, plant tours, work/study or cooperative education programs, and loaning of executives or instructors. Two-thirds of the respondents recruited employees from the vocational education system. Those who did not recruit cited these reasons: lack of hiring by company, insufficient training of graduates, and a ready supply of experienced workers. Over half of the respondents (58 percent) had a training arrangement with vocational education institutions. Most commonly, employers used vocational education for occupationally specific or technical training. (The questionnaire is appended.) (YLB)

FORMAT: Research Report, 11p.
 AVAILABILITY: For a microfiche copy of this document order ED272734 from FEIS.

TITLE **"Ford, Change, and Community Colleges: An Important Partnership."**
 AUTHOR Petersen, Donald E.
 JOURNAL *Community, Technical, and Junior College Journal*, v58 n1 p24-27 Aug-Sep 1987
 ANNOTATION Describes two cooperative programs involving the Ford Motor Company and community colleges: the voluntary joint United Auto Workers-Ford Employee Development and Training Program, which serves both dislocated and active workers; and the Ford ASSET (Automotive Student Service Educational Training) Program, a two-year cooperative work study program. (DMM)

TITLE **"Fostering Rural/Corporate Partnerships."**
 AUTHOR Vermillion, Mark
 JOURNAL *Journal of Rural and Small Schools*, v1 n1 p11-12 Fall 1986
 ANNOTATION Discusses how rural groups might approach corporations to forge partnerships for a variety of educational and community programs and activities. Makes specific suggestions for selecting corporations, writing the first requests for information, evaluating responses, and following up leads. Includes a section on the workings of Apple Computer's grant programs. (JHZ)

TITLE *Higher Education Partnerships: Practices, Policies, and Problems. Postsecondary Education for a Changing Economy Project.*

DATE 1986

AUTHOR Gold, Gerard G., Charner, Ivan

ANNOTATION Partnerships between postsecondary education institutions and employers, unions, professional associations, and other groups are discussed. The majority of examples are based on projects of the Education and the Economy Alliance, a program supported by the Fund for the Improvement of Postsecondary Education. Partnerships and joint, or collaborative, activities of colleges and these groups often involve research, economic development, and human resource development. Research partnerships may be basic or applied and may lead to new and profitable products. Economic development partnerships frequently concern community development, institutional development, and business development. Human resource development partnerships can be categorized as: entry-level preparation and orientation, technical skill development and maintenance, career transition preparation and skill enhancement, and career completion. The following basic factors involved in collaboration are considered: the organization's mission, the location within an organization of the partnership project, the level of leadership involvement with the project, and the depth of collaboration (i.e., how deeply felt are the values and practices of collaboration). (SW)

FORMAT Position Paper, Project Description, 40p

AVAILABILITY For a microfiche copy of this document order ED281419 from FEIS

TITLE *Identifying and Enhancing Industry-Education Partnerships in Postsecondary Vocational Education.*

DATE 1987

PROJECT DIRECTOR Woodhull, W. J., (406) 587-1877. Public Information and Education Services, Incorporated, 1915 West College, Bozeman, MT 59715

ANNOTATION Technical assistance will be provided, and a general marketing strategy will be developed to support these partnerships. Examples of industry/education partnerships will be identified, enhanced, and disseminated. Also examples of radio, television, and press scripting will be provided, and media contacts in the greater Atlanta area will be established. In addition to the examples, lists of media contacts, marketing strategy, and quarterly and final reports will be delivered.

FORMAT Project Description

NOTE Start Date 15 Oct 86; End Date 16 Feb 87

TITLE *Improving Education through Greater Partnerships with Business and Industry.*

DATE 1985

AUTHOR Theede, Marcy P.

ANNOTATION Perspectives on a greater partnership between education and business/industry are offered. The goal of this partnership is to achieve educational excellence. To accomplish this, greater participation of

business and industry in the universities' educational preparation programs is needed. It is necessary to define role responsibilities for a mutually beneficial and functional relationship, plan specific strategies whereby various role responsibilities result in desired outcomes, develop sample application models that support the partnership philosophy, and evaluate by applying relevant criteria. Dimensions of the partnership need to be negotiated, including fiscal support, material/equipment, personnel resources, staff development, research and development, and handling new information. The planning process for a productive partnership would involve developing a philosophical base for the agreement, parameters of the relationship, general goals, role responsibilities, and an action plan. Implementing the plan and applying evaluation criteria complete the process. It is emphasized that the excellence needed to improve education depends on a greater partnership with business and industry. (SW)

FORMAT Conference Paper, 12p

NOTE Paper presented to the Annual Conference of the National Council of States on Inservice Education (10th, Denver, CO, November 1985).

AVAILABILITY For a microfiche copy of this document order ED273232 from FEIS

TITLE *"Improving Practice: Lessons from the Case Studies."*

AUTHOR Rolzinski, Catherine A., Charner, Ivan

JOURNAL *New Directions for Continuing Education*, n33 p75-85 Spr 1987

ANNOTATION The authors present lessons learned from six case studies that offer considerations and directions for integrating education and work. Lessons are on the topics of (1) how to establish productive partnerships, (2) perceptions and involvement of the community in economic development, and (3) how to integrate education and work to serve adult learners. (CH)

TITLE *Industrial Cooperative Technical Program.*

DATE 1987

PROJECT DIRECTOR McDonough, James L., (804) 547-0153. Chesapeake City Schools, PO Box 15240, Chesapeake, VA 23320

ANNOTATION On-the-job experience will be provided to qualified students enrolled in a Chesapeake Technical Center course. This will (1) enable the students to improve their job skills, (2) provide employers with workers with developed job skills, (3) strengthen trade and industrial education instruction, and (4) enhance development of a close working relationship between the technical center and the industrial community. Remedial skill training of participating students will be provided at the employer's request. The coordinated and supervised part-time job experiences will make the transition to full-time employment smoother. The cooperative program will be based at the technical center as a model for future development of programs statewide.

FORMAT Project Description

NOTE Start Date 01 Jul 86; End Date 30 Jun 87

- TITLE:** *"Industry and Education: Partners in Training Teachers."*
- AUTHOR:** Oakey, Joseph
- JOURNAL:** *Vocational Education Journal*, v61 n6 p31-33 Sep 1986
- ANNOTATION:** The author's company, Autodesk, Inc., developed and implemented a model industry-based training program for teachers of computer-aided drafting. (CH)
- TITLE:** *"Industry Training in a High School."*
- AUTHOR:** Unger, Rich
- JOURNAL:** *Vocational Education Journal*, v61 n7 p33-34 Oct 1986
- ANNOTATION:** Describes a partnership between the Licking County Joint Vocational School in Newark, Ohio, and General Motors Corporation. The school houses a remote training center for General Motors automotive technicians that also trains the school's instructors. (CH)
- TITLE:** *Innovative Vocational Education/Business Linkages.*
- DATE:** 1986
- PROJECT DIRECTOR:** Visnic, Ann B.; O'Brien, Ralph. (606) 572-5398. Northern Kentucky University, Technology and Occupational Education, Highland Heights, KY 41076
- ANNOTATION:** A research project will be conducted to educate employers regarding the economic and productive importance of vocational education and the nature of long-range goals and educational objectives of programs. An advocacy effort will be undertaken to develop on the part of vocational educators and business/industry a greater awareness of the concept and necessity for occupational adaptability and transferable skills in today's job market. Employers' expectations for minimum acceptable standards of performance, including base knowledge, skills, and attitudes for graduates of vocational education programs, will be assessed. Approximately 100 representative employers will be identified to supply database information. Data on employer expectations and education-training responsibilities will be collected by survey questionnaires and be compiled and interpreted. A format will be planned and designed for a one-day workshop for approximately 30 employer representatives and 10 vocational educators. An informational package will be produced for employers covering pertinent information about Kentucky's vocational education programs, goals, objectives, and student competency assessment as related to employability potential. Other products will include interim and final reports and workshop planning materials.
- FORMAT:** Project Description.
- NOTE:** Start Date 01 Jul 85; End Date 30 Jun 86
- TITLE:** *Job Shadowing Experiences for Vocational Teachers.*
- DATE:** 1986.
- PROJECT DIRECTOR:** Peters, Steve. (206) 941-0100. Federal Way School District, 31455 28th Avenue South, Federal Way, WA 98003
- ANNOTATION:** High school teachers of vocationally approved industrial arts and trade and industry courses will spend time in community businesses to become current with the latest developments in new technology and machine processes. They will "shadow" employees during the regular business day and have an opportunity to ask questions and use materials and equipment. The project will allow time and opportunity for teachers and business people to gain mutual respect for each other and to build an ongoing relationship. As a result of job shadowing, teachers will become aware of work skills needed by students and gain ideas for practical applications in the classroom and student projects. A minimum of nine teachers will spend a minimum of four days in businesses selected to meet individual teacher need, interest, and specialty. Visits will be made mainly during spring break and summer vacation. Business hosts will be encouraged to develop a partnership relationship with the participating teachers and to visit classrooms as their schedules permit. Teacher participants will make a brief presentation about their experiences to other industrial arts teachers at an inservice meeting and share ideas for classroom instruction in small group discussion sessions. A final report will be written.
- FORMAT:** Project Description.
- NOTE:** Start Date 24 Feb 86; End Date 31 Dec 86.
- TITLE:** *Joint Ventures. The Industry-Labor-Education Connection.*
- DATE:** 1987.
- DEVELOPER:** Florida State Council on Vocational Education, Tallahassee.
- ANNOTATION:** The purpose of this paper is to examine substate linkages between business, labor, and vocational education in Florida. Information for the paper was gathered by reviewing the activities of the Regional Coordinating Councils for Vocational, Adult, and Community Education, the Private Industry Councils, the regional consortia, and organized labor. In addition, a literature search was conducted, and the report lists and reviews significant linkage-related publications, including reports of related Florida studies conducted over the past few years. This is followed by descriptions of current state-level vehicles for linkage programs and substate-level linkage activities. The state-level vehicles include ACCESS (the state's education clearinghouse for economic development); the Division of Vocational, Adult, and Community Education; the Florida Council on Vocational Education; the Florida Education and Industry Coalition; the Florida High Technology and Industry Council; the Industry Services Training Program and Advisory Council; the Job Training Partnership Act; the Southern Technology Applications Center; the Sunshine Skills Act; and the Trust Fund for Postsecondary Cooperation. Substate linkage activities are described for Regional Coordinating Councils, Private Industry Councils, regional education-industry consortia, and organized labor. As a result of the study, the Florida Council on Vocational Education made the following recommendations: (1) to strengthen the industrial representation component on the Regional Coordinating Councils,

(2) to strengthen the involvement of labor and apprenticeship in vocational education, and (3) to increase regional coordination of vocational education and training activities and related organizations. Appendices include a Regional Coordinating Council linkages survey form, maps showing planning regions, service delivery areas, and regional consortia areas, and a questionnaire on labor's linkages to vocational education (KC)

FORMAT: Review Literature, 65p

AVAILABILITY: For a microfiche copy of this document order ED278849 from FEIS

TITLE: **Kansas Community College Business/Industry Relationships Report, 1985-86 School Year.**

DATE: 1987

AUTHOR: Gainous, Fred, And Others.

ANNOTATION: Statewide data were gathered to determine the extent of the relationship between business and industry and Kansas's community college system during the 1985-86 school year. Analyses of the data indicated that: (1) the community college system served 20,175 employees of 425 businesses in the state with 731 courses and 351 non-credit services offered through 40 major educational programs; (2) on the average, each college served 1,120.8 employees of 22.4 businesses with 43 courses and 19.5 non-credit services; (3) the number of businesses served by the colleges ranged from a low of 2 companies to a high of 82 firms; (4) each of the colleges generated at least 22 credit hours by serving business/industry, while one college generated 3,378.5 credit hours by doing so; (5) six of the colleges offered no non-credit services, while one institution offered 99 non-credit services; (6) three schools served 41.6% of all businesses/industries; and (7) the most significant educational programs in terms of numbers of businesses served were allied health, business, and management, which accounted for 48% of the businesses and over 31% of the employees served by the state system. The bulk of the report consists of tables providing statewide and institutional data on business/industry relations (LAL).

FORMAT: Research Report, Statistical Material, 78p

AVAILABILITY: For a microfiche copy of this document order ED276485 from FEIS

TITLE: **Keeping America Working Project: Industry Training Inventory, 1986.**

DATE: 1986

AUTHOR: Gollattscheck, James, And Others.

DEVELOPER: Office of Vocational and Adult Education, Washington, DC. Clearinghouse on Adult Education

ANNOTATION: A survey was conducted of selected two-year colleges to gain an in-depth knowledge about the business/industry training programs provided by these colleges and to quantify the efforts of two-year colleges to improve the quality of the work force and the efficiency of public and private enterprises. Study findings, based on responses from 54 of the 72 institutions surveyed, in-

cluded the following: (1) more than half of the responding institutions served urban areas, while another 35% served suburban districts; (2) half of the colleges reported that more than 50% of their students were enrolled in occupational/technical curricula; (3) urban and suburban institutions reported that 61% to 70% of the credit student population attended part-time; (4) 80% of the colleges offered between 1 and 20 credits for work-related experience; (5) more than 50% of the urban colleges, 33% of the suburban colleges, and 10% of the rural colleges reported that the industries in their areas were international in scope; (6) 42% of the colleges offered educational training programs for military personnel, with college charges for individual contracts ranging from \$2,000 to nearly \$950,000; (7) the average number of firms involved with industry/college partnership training programs with individual colleges ranged annually from a low of 40 for rural institutions to a high of 530 for urban colleges; (8) during a 1-year period, over 28,000 employees took job-related courses in the responding colleges, with 21,562 of these employees trained at urban institutions; (9) 50% of the urban and suburban colleges and 66% of the rural colleges reported that employees taking job-related courses were fully subsidized by their employers; and (10) over 650 courses/programs were offered by the colleges to local industries, with the majority offered off-campus. Appendices include the survey instrument, a directory of respondents, a list of courses offered by participating colleges to business and industry, and the executive summary of the book *In Search of Community College Partnerships* by Philip R. Day, Jr. (AYC)

FORMAT: Research Report, Statistical Material, 138p

AVAILABILITY: For a microfiche copy of this document order ED281585 from FEIS

TITLE: **Linkage between Vocationally Trained Participants and Industry Registered Apprenticeship Programs: An Implementation Manual.**

DATE: 1983

AUTHOR: Thomas, Hollie B., And Others.

DEVELOPER: Florida State Dept. of Labor and Employment Security, Tallahassee.

ANNOTATION: This manual was developed to provide assistance to persons in registered apprenticeships and vocational education who wish to form a link between these two institutions. It offers a procedure that can be adapted to meet local conditions. The major sections of the manual define linkage, describe when linkage is likely to occur, list the possible benefits, enumerate the conditions that facilitate linkage, describe how to develop a linkage plan, provide suggestions on how to implement linkage plans, and describe an evaluation process. (This structure was selected for the manual so that those considering entering into a linkage agreement could establish what they deem are necessary ingredients for a linkage plan, as well as weigh the possible costs and benefits of entering into such an agreement, before making initial contacts with the agency with which linkage is proposed.) In addition, the manual provides assis-

- tance in making important first contacts so that the conditions that facilitate linkage can be maximized. Procedures for determination of the content of the linkage agreement and the development of the process to accomplish the activities also are provided. Finally, suggestions about how to carry out and evaluate the planned activities are provided. Sample forms for a linkage arrangement are offered in appendixes to the manual. (KC)
- FORMAT: Administrative Material, 65p.
- AVAILABILITY: For a microfiche copy of this document order ED273846 from FEIS.
- TITLE: **Linking Education and Industry at Two-Year Colleges: The Raymond Walters College Experience. NCCSCE Working Paper Series.**
- DATE: 1986.
- AUTHOR: Flory, Harriette.
- ANNOTATION: At Raymond Walters College (RWC), a two-year branch of the University of Cincinnati, the concept of developing linkages with business and industry began in 1983 with the creation of a new administrative office of Educational Services and a new community advisory board, the RWC Work and Learning Council. Though RWC provides noncredit training in a variety of areas for several companies in its service area, the most important linkage that the college has developed is a master contract between the Educational Services Office and the General Electric (GE) Aircraft Engine Business Group. The blanket contract provides an umbrella agreement under which the signatories can develop specific educational services. These services include: (1) special noncredit training on RWC's computer to GE employees; (2) a comprehensive After Hours noncredit training program featuring classes in cardiopulmonary resuscitation, materials and processes for jet engines, blueprint reading, and professional engineer's review; and (3) a two-year associate degree program in manufacturing engineering technology, which offers such advantages as external testing, assessment, and academic advising; college study skills seminars; credit for prior college and work experience; utilization of the company's tuition refund program; confidentiality; credentialing; accountability; low cost, convenient locations; and resources of four colleges of the University of Cincinnati. The success of the contract agreement between GE and RWC is the result of the adaptability, creativity, and pragmatism of the leaders of both institutions who have collaborated to mesh company needs and college resources. (EJV).
- FORMAT: Project Description, 11p.
- AVAILABILITY: For a microfiche copy of this document order ED274397 from FEIS.
- TITLE: **"Making Economic Development Work: A Systematic Approach to Contract Training."**
- AUTHOR: Israel, Cary A.; Custer, Harriet H.
- JOURNAL: *Community Services Catalyst*; v16 n4 p16-18 Fall 1986.
- ANNOTATION: Reports on the activities of Des Moines Area Community College's Economic Development Group (EDG), a division created to develop and coordinate a systematic approach to providing contract training for business and industry. Highlights the Project File System as the core of the EDG's delivery system. (AYC).
- TITLE: **"Many Aggressive Community Colleges Focusing on Training Workers for Fast-Growing Fields."**
- AUTHOR: Fields, Cheryl M.
- JOURNAL: *Chronicle of Higher Education*; v33 n24 p21 Feb 25 1987.
- ANNOTATION: Aggressive community colleges are fostering linkages with government programs, large and small businesses, and educational institutions for special training to upgrade worker skills, prepare workers to cope with plant closings, and meet the skill requirements of advancing technology. (MSE).
- TITLE: **"New Directions in Corporate Training."**
- AUTHOR: Conover, Donald K.
- JOURNAL: *Vocational Education Journal*; v62 n3 p23-25 Apr 1987.
- ANNOTATION: The pace of technological change is widening the gap between public sector vocational education and in-house corporate training. However, corporate trainers can learn the fundamental skills of teaching from vocational educators, who in turn can benefit from industry's progress in specialized course analysis, design, and development. (SK).
- TITLE: **"Partnerships: Making a Difference over Time."**
- AUTHOR: Page, Essie G.
- JOURNAL: *Journal of Career Development*; v13 n3 p43-49 Spr 1987.
- ANNOTATION: Questions the rush to support business-school partnerships as the panacea for American education. Lists the benefits of such arrangements. Discusses successful partnerships' characteristics and discusses possible future avenues for partnerships. (CH).
- TITLE: **Placement and Follow-up.**
- DATE: 1986.
- PROJECT DIRECTOR: Towry, Betty J., (904) 237-2111. Central Florida Community College, PO Box 1388, Ocala, FL 32678.
- ANNOTATION: A brochure will be produced which depicts training/education opportunities through Central Florida Community College and describes the curriculum activities in each college course plan. The material will be non-biased and illustrate the services offered through the vocational programs and the college career placement and cooperative office. The brochure will be used to increase student placement by increasing contact with the business community through printed materials (the brochure) which will be included in local Chamber of Commerce

mailings and by increasing familiarization within the community with vocational programs offered at the college. The brochure will be used by college placement officers and instructors, and a mailing will become part of the initial contacts made with local industry. Employer contacts will increase by 500.

FORMAT: Project Description

NOTE: Start Date 28 Feb 86, End Date 30 Jun 86

TITLE: **Preparing for High Technology: Successful Co-op Strategies. Research and Development Series No. 263.**

DATE: 1986

AUTHOR: Franchak, Stephen J.; Smith, O. H. Michael

DEVELOPER: Office of Vocational and Adult Education Washington, DC

ANNOTATION: This document has been prepared to assist program administrators and practitioners in planning and implementing cooperative (co-op) programs in high technology occupational areas. Information focuses on the key elements, strategies, and procedures of successful co-op programs. The guide contains nine chapters and is based on a review of the literature, discussions with educators and business representatives, and reviews of databases and case studies. Chapter 1 examines the training-related problems that respond positively to effective cooperative training programs in high technology fields and provides definitions of relevant terms. Chapter 2 discusses pertinent findings from the literature review, including cooperative education and its benefits, how the needs of high technology industries affect cooperative training programs, and the components necessary to a quality cooperative program. Chapter 3 draws from case studies to discuss the educational and economic benefits of cooperative programs, addresses what is needed to develop a quality program, and provides ways to identify potential cooperative training sponsors. Chapter 4 examines guidelines for developing cooperative program policies, while Chapter 5 reviews project findings on ways to enhance the learning experiences of co-op students. Chapter 6 addresses special population and equity issues as they relate to cooperative education. Chapter 7 discusses strategies for marketing co-op programs to employers, to students, and to the community. Chapter 8 examines the importance and components of effective evaluation of co-op programs. Chapter 9 takes a close look at the importance and methods of interpreting and presenting the results of program evaluation. Appendixes contain sample program materials and resource lists. (KC)

FORMAT: Administrative Material, 133p

AVAILABILITY: For a microfiche copy of this document order ED272684 from FEIS

TITLE: **Professional Improvement Conference for Occupational Education Personnel.**

DATE: 1987

PROJECT DIRECTOR: Ovan, Lawrence A.; (617) 345-2151. Fitchburg State College, Highland Avenue, Fitchburg, MA 01420

ANNOTATION: Education personnel will collaborate with business and industry personnel to plan, conduct, and administer a 4-day professional development conference for approximately 700 vocational educators. The 30 workshops will be specific to various trades, special needs, guidance, testing, computer applications, and other fields. Results of the workshop series will be summarized in a printed final conference report.

FORMAT: Project Description

NOTE: Start Date 28 Oct 86, End Date 30 Jun 87

TITLE: **Profitable Partnerships: Public-Private Partners in Economic Development.**

DATE: 1986

AUTHOR: Edge, Barbara; MacDonald, William J.

ANNOTATION: Four case studies are presented to demonstrate the economic development potential of partnerships between community colleges and public and private sectors, focusing on programs that targeted a specific area of need in Oregon's economic base and raised significant funds for program implementation. Introductory comments provide background information and discuss the partnerships in terms of their benefits to the partners and to the public. The four case studies describe the public-private partnerships in detail, including discussions of the objectives, conception, funding strategy, and problems of each. The first case study is of the Fisherman Technology Program at Clatsop Community College, a marine and commercial fishing program designed to provide technical information and training in fish-finding systems and other technological advances to captains of United States fishing vessels. The Cascade Business Center Corporation is the subject of the second case study. The Corporation is a "business incubator" partnership at Portland Community College (PCC) formed to improve economic conditions in Northeast Portland by providing education, consultation, and professional support services to new and emerging small businesses, with preference given to minority- and women-owned businesses. The third case study describes the 2 + 2 + 2 Cooperative Honors Program in Electrical Engineering and Computer Engineering offered by PCC, the University of Portland, and Oregon Graduate Center to meet the needs of the high technology industry in metropolitan Portland. Finally, the fourth case study focuses on ED-NET, a statewide instructional television fixed service (ITFS) microwave system developed by 15 Oregon community colleges to bring specialized and custom-designed educational programs to underserved groups throughout the state. Additional materials include two articles from "Oregon Business," a list of participating Portland businesses, a course of study for 2 + 2 + 2, and maps showing the range of the ITFS microwave system. (LAL)

FORMAT: Conference Paper; Project Description, 45p

NOTE: Paper presented at the Annual Conference of the Council for Advancement and Support of Education (3rd, Alexandria, VA, December 9-11, 1986).

AVAILABILITY: For a microfiche copy of this document order ED278436 from FEIS

TITLE: **"Proven Partners: Business, Government, and Education."**

AUTHOR: Scott, Robert

JOURNAL: *Community, Junior and Technical College Journal*, v57 n3 p16-19 Dec-Jan 1986-1987.

ANNOTATION: Describes the interrelated roles of community colleges, government, and business/industry in North Carolina's economic development program. Examines the history of North Carolina's Research Triangle Park and its community college system. Reviews the community colleges' efforts to identify and meet business/industry's needs for communication, quality, retraining, and skilled new employees. (DMM)

TITLE: **School-Business Partnerships. Resource Bulletin Number 2, Spring 1987.**

DATE: 1987.

AUTHOR: Turnbaugh, Anne.

DEVELOPER: Office of Educational Research and Improvement, Washington, DC.

ANNOTATION: This resource bulletin consists of a discussion of the benefits to be gained from starting a school-business partnership and an annotated bibliography of resources dealing with different aspects of school-business partnerships. Included in the bibliography are four overviews of school-business partnerships, four guides to starting a partnership, two works devoted to the adopt-a-school model, two studies of partnerships for special populations, and a description of a partnership for staff development. Addresses of five organizations to contact for more information on partnerships and bibliographic citations of two introductory references dealing with partnerships are also provided. (MN)

FORMAT: Directory, 5p.

AVAILABILITY: For a microfiche copy of this document order ED283988 from FEIS.

TITLE: **"School-Business Partnerships: Working to Defuse the Dropout Time Bomb."**

AUTHOR: Justiz, Manuel J.; Kameen, Marilyn C.

JOURNAL: *NASSP Bulletin*, v70 n494 p103-08 Dec 1986.

ANNOTATION: Discusses business-school partnerships designed to confront the declining number of high school graduates, the ever-worsening dropout problem, and projected shortages of technically skilled workers. Describes regional and national collaborative programs sponsored by Digital, Hewlett-Packard, Lockheed, and Atlantic-Richfield. Includes six references. (MLH)

TITLE: **"Service Wars": The Race To Be the Best in Product Service.**

DATE: 1987.

AUTHOR: Knox, Robert J.; Lorenzo, Albert L.

ANNOTATION: To meet the price and quality challenges of foreign manufacturers, U.S. industry has had to invest heavily in technology, incorporating it extensively into both the manufacturing process and product. This trend, termed the "New Industrial Revolution," has created a new challenge—educating techni-

cians to service these highly technical, micro-electronic, and computer-controlled products. One model for meeting this challenge is being piloted by Chrysler Corporation at Macomb Community College (MCC) in Michigan to address the critical needs of Chrysler dealers for highly skilled automotive service technicians. The 4-year Chrysler Dealer Apprentice Program (CAP) has the following unique features: (1) both MCC and Chrysler participate in recruitment and student selection; (2) during the first 2 years of the program, the student goes to school for 2 months studying subjects specific to Chrysler's systems and basic automotive theory and practice, then goes to work at the dealership for the next 2 months to work under the guidance of an experienced technician on those systems studied in school; (3) the technician is paid a stipend to check the student's work, the student is paid as a part-time employee of the dealership; (4) after graduation, the student becomes a full-time employee of the dealership for 2 years; (5) CAP operates through a signed contract between the student and the sponsoring dealer; (6) Chrysler and MCC are working together to redefine the content of a number of liberal arts associate degree requirements to make the courses more relevant to the automotive student; and (7) all participants in the program—Chrysler, MCC, the dealership, and the student—make specific contributions and commitments to the program. (PAA)

FORMAT: Conference Paper; Project Description, 5p.

NOTE: Paper presented at the Annual National Convention of the American Association of Community and Junior Colleges (67th, Dallas, TX, April 22-25, 1987).

AVAILABILITY: For a microfiche copy of this document order ED282603 from FEIS.

TITLE: **Small Business Consortium: Research Project in Vocational Education. Final Report.**

DATE: 1986.

AUTHOR: Belcher, Jacquelyn; Hutchison, Kae R.

DEVELOPER: Washington Research Coordinating Unit for Vocational Education, Olympia; Washington State Commission for Vocational Education, Olympia.

ANNOTATION: Five community colleges and two vocational-technical institutes located in King County, Washington, together with the Washington State Department of Employment Security, undertook a research project to (1) collect nationally available information on current research and successful practices in assistance to small businesses; (2) conduct a survey of local King County resources for small businesses; and (3) develop a pilot plan for working together to improve services to small business. Two consultants worked with the consortium and a 12-member business advisory board during a five-month period on these objectives. At project's end, consortium members had information on the reasons for small business failure; reviews of 28 model programs and in-depth reports on 3 of them; a survey of the educational programs offered for small businesses by all of the state-supported community colleges and vocational schools in the county; and reference manuals of local and state/national resources. Finally,

the consultants recommended six goals toward which the consortium can work during the next two years. The consortium is planning a project that will include development of a joint core curriculum of intensive courses for small businesses, research to provide information for small businesses in the county, and forging links with other organizations serving small businesses. (Following an 11-page narrative, appendixes include information on the recruitment and services of consultants, an annotated bibliography on small business training needs and causes of failure, a survey of model training programs, a summary of institutional offerings for small businesses, and the consortium mission statement and membership.) (KC)

FORMAT: Research Report, 83p

NOTE: Prepared jointly with the King County Small Business Consortium Planning Group

AVAILABILITY: For a microfiche copy of this document order ED281004 from FEIS

TITLE: **Small Business Incubator Educational Development Program Education & Training Center. Final Report.**

DATE: 1986

DEVELOPER: Washington State Commission for Vocational Education, Olympia

ANNOTATION: The establishment of Green River Community College's Education and Training Center as a permanent anchor tenant in the Kent Business Incubator required the college to develop a comprehensive business plan and needs assessment survey. College and community leaders identified the role and services of the educational tenant, leading to the development of a mission statement and comprehensive business plan. A training needs assessment questionnaire was designed to survey more than 300 businesses in the area. As a result of these activities, the college convinced the State Board for Community College Education to fund leased space in the Incubator. The plan launched a new extension of the college that will specialize in custom-designed training. A marketing plan for the new Education and Training Center resulted in the creation of a new logo, the preparation of a budget, and development of architectural drawings that identify classrooms, offices, and video and computer areas. The needs assessment questionnaire has provided the college with new insight into the structure and composition of area businesses, current education and training practices, sources of training, training formats, and specific subject areas where training is needed. The college was able to establish nontraditional, results-oriented education extension capable of delivering high quality, cost-effective, customized education and training programs tailored to the special needs of businesses and individuals. (Appendixes, which comprise 90 percent of the document, include a slide script, the business plan for 1986-87, the presentation to the State Board, and a copy of the survey.) (KC)

FORMAT: Project Description, 147p

AVAILABILITY: For a microfiche copy of this document order ED281005 from FEIS

TITLE: **Summer Internship—Professional Growth.**

DATE: 1987

PROJECT DIRECTOR: Flynn, Meredith; (609) 468-1445. Gloucester County Vocational School, Tanyard Road, Deptford Township, Box 186, Sewell, NJ 08080

ANNOTATION: Summer internship opportunities will be provided to three vocational education teachers and one vocational/career guidance counselor. Participants will become aware of new and emerging technologies in the welding, printing, and machine trades industries. The teachers will visit at least five businesses or industries to update themselves on new techniques and equipment. The career/vocational guidance counselor will visit at least five skilled trades-related businesses or industries to become familiar with nontraditional career opportunities. The program will result in improved linkage with businesses/industries and will provide a basis for curriculum revision.

FORMAT: Project Description

NOTE: Start Date 01 Jul 86; End Date 30 Jun 87

TITLE: **Technical Coordination with Business and Industry.**

DATE: 1986

PROJECT DIRECTOR: Briscoe, Melissa; (502) 564-3775. Office of Vocational Education, Program Service Division, Capital Plaza Tower, Frankfort, KY 40601

ANNOTATION: A project will continue an effort of the Office of Vocational Education to link with business and industry leaders to provide a base of expertise in postsecondary program planning for high technology training. At least three of the following areas will be included: electronics applications, computer technology, automated manufacturing, construction, automotive technology, and industrial technology education. Objectives will be to provide technical assistance in review and analysis of technical program content and instructional content, conduct and analyze needs assessments, analyze cost effectiveness of high technology programs, and develop a program plan and implementation strategies for each area undertaken based on analysis and needs assessment. Advisory members representing business/industry and educators will be selected for each committee. Each committee will hold two 2-day meetings to address project objectives and make recommendations for program improvement. Using those recommendations, staff, teachers, and representatives of the advisory committee will develop an implementation plan.

FORMAT: Project Description

NOTE: Start Date 01 Jul 85; End Date 30 Jun 86

TITLE: **"Technology-Assisted Adult Learning."**

AUTHOR: Carrier, Carol A

JOURNAL: *Training and Development Journal*, v41 n6 p98-100 Jun 1987

ANNOTATION: Describes the Alliance for Research and Development in Applied Learning Technology, an effort of the University of Minnesota and the Wilson Learning Corporation to promote cooperation in research,

training, and development. The alliance sponsors projects that address questions on adult learning and technological applications facilitating adult learning. (CH)

develop a monograph of the experience, and prepare a written plan for applying the knowledge and skills gained.

FORMAT: Project Description.

NOTE: Start Date 01 Jul 86, End Date 30 Jun 87

TITLE: **"A Three-Way Training Partnership."**

AUTHOR: Pautler, Albert J., Schiavone, Dominic

JOURNAL: *Vocational Education Journal*, v62 n3 p30-31 Apr 1987.

ANNOTATION: New York State's public secondary and postsecondary institutions serve as training providers for business and industry. Train-the-trainer programs have prepared skilled industry personnel to teach. (SK)

TITLE: **Vocational Education-Job Training Partnership Act Coordination. First Annual Report.**

DATE: 1987

AUTHOR: Lewis, Morgan V., And Others.

DEVELOPER: Office of Vocational and Adult Education, Washington, DC

ANNOTATION: A study examined the extent of joint planning and coordination between vocational education and private sector Job Training Partnership Act (JTPA) programs during 1986. Data were collected from the following sources: mail surveys of staff in the state agencies responsible for administering the Carl D. Perkins Vocational Education Act and JTPA (72 percent response), telephone interviews with the directors of these agencies (99 percent response) and with the chairpersons of the councils established by the acts (90 percent response), and site visits to 9 states and 26 service delivery areas. The overall conclusion is that although many JTPA program clients are receiving instruction in public vocational education programs, such instruction is not the result of joint planning. Rather, JTPA officials decide the kinds of training to be provided, and public vocational education institutions are often selected to provide the training. The exception is programs funded under the JTPA 8 percent set aside. Joint planning in the development of these particular arrangements is the rule rather than the exception because the legislation governing the programs requires cooperative agreements. Federal, state, and local policymakers appear to have several options that could foster increased cooperation between vocational education and JTPA. (Appendixes include 20 supplemental tables and summary information on programs that responded to requests for information on successful coordination.) (MN)

FORMAT: Evaluative Report, 147p.

AVAILABILITY: For a microfiche copy of this document order ED284075 from FEIS.

TITLE: **Try Non-Traditional.**

DATE: 1986

PROJECT DIRECTOR: Goldstein, Gloria, (502) 426-8770 Jefferson Vocational Education, Region 8911, Shelbyville Road, Louisville, KY 40222.

ANNOTATION: Focus of a continuation of the Try Non-Traditional (TFO) project will be on greater involvement of business and industry in nontraditional programs and placement. Awareness activities will be continued in high school, correctional facilities, and other agencies. Support activities for potential applicants, persons on the waiting list, and enrolled students will be continued and coordinated with support personnel responsible for implementing a postsecondary model. Industry's perceptions of nontraditional jobs in high technology areas and where these jobs would be found will be determined. Industry will be made aware of what male and female students can do in nontraditional jobs, and the exchange of information between vocational teachers and industry personnel will be increased. Fifty currently enrolled students will continue in training, and one hundred ten additional students will enroll in male or female nontraditional courses. The methodology will include group counseling, individual counseling, video materials, direct mail literature to business and industry, workshops for personnel managers to interact with vocational teachers to establish two-way communication, leadership training, on-site industry visitations for industrial input, and such activities as are necessary to implement industry recommendations.

FORMAT: Project Description.

NOTE: Start Date 01 Jul 85, End Date 30 Jun 86.

TITLE: **Vocational Education Internship Program.**

DATE: 1987

PROJECT DIRECTOR: Butts, Gerald, (907) 333-9561 Anchorage School District, 4600 De Barr Road, Box 6-614, Anchorage, AK 99502-0614

ANNOTATION: Through the Anchorage Chamber of Commerce, 15 intern vocational teachers or guidance counselors will be placed in a work site for four weeks to upgrade their skills. A plan will be developed for each participant to ensure training in all levels of operation and management emphasizing hands-on experience with the latest equipment and techniques used in local business and industry. In a 6-day post session, each intern will make a 1-hour presentation.

TITLE: **Vocational Education Summer Inservice Conference.**

DATE: 1986

PROJECT DIRECTOR: Downing, Jimmie, (316) 792-2701 Barton County Community College, Great Bend, KS 67530

ANNOTATION: State vocational education staff and the Kansas Vocational Association will present a statewide inservice conference for business, industry, labor, and educational personnel interested in preparing a trained workforce. In-depth activities will be provided with experts, and labor force developers will be able to exchange concerns and ideas with employers. Conference evaluation results will be summarized and used to coordinate next year's conference.

FORMAT: Project Description
NOTE: Start Date 01 Jul 85, End Date 30 Jun 86

TITLE: **"War without Guns: Workplace Training and Retraining."**
AUTHOR: Garrison, Don
JOURNAL: *Community, Junior and Technical College Journal*, v57 n3 p20-23 Dec-Jan 1986-87
ANNOTATION: Advocates business, education, and government cooperation in worker training and retraining. Examines economic trends in world trade and domestic businesses. Urges community college leaders to play a more active role in initiating contacts with employers to determine training needs; attracting new jobs to their service areas; and designing job-specific programs. (DMM)

TITLE: **"Worker Education for a Changing Economy: New Labor-Academic Partnerships."**
AUTHOR: Derber, Charles
JOURNAL: *New Directions for Continuing Education*, n33 p49-57 Spr 1987.
ANNOTATION: A team of faculty and advanced graduate students from Boston College developed a new educational partnership with labor unions to help combat problems of industrial dislocation and upheaval. The group worked with five different union locals experiencing serious problems associated with foreign competition and new technology. (CH)

TITLE: **"Yours Is More Equal than Mine: A Successful Industry/Education Partnership."**
AUTHOR: Roth, Gene L.
JOURNAL: *Journal of Vocational and Technical Education*, v3 n2 p13-19 Spr 1987.
ANNOTATION: This article highlights an industry/education partnership that has been highly successful in serving the intent of federal vocational legislation concerning sex equity. The project, Women's Access to Nuclear Technology (Project WANT), represents a transportable model for developing industry/education partnerships to achieve mutually beneficial goals. (CH)



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